



Pregnant Women and Infants

Provided by the Wisconsin Information for State Health Policy Program, a program funded by the Division of Health and the Robert Wood Johnson Foundation.

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LIST OF TABLES AND FIGURES

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1.	Population of Women Ages 15-44, 1990-1994	1
Table 2.	Poverty Status of Women Ages 18-44, 1989	1

BIRTHS AND FERTILITY RATES

Table 3.	Total Births and Birth Rates, 1990-1994	2
Table 4.	Comparison of Birth Rates, 1994	2
Table 5.	Comparison of Age-Specific Birth Rates, 1992-1994 Averages	3
Table 6.	Age-Specific Birth Rates, Three-Year Averages	3

MATERNAL AND INFANT CHARACTERISTICS

Table 7.	First Prenatal Care Visit and Low Birthweight, 1990-1994	4
Figure 1.	Percent of Women Obtaining First-Trimester Prenatal Care, 1994	4
Table 8.	First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994 ..	5
Figure 2.	Percent of Births with Low Birthweight (<2,500 grams), 1994	5
Table 9.	First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994	6
Table 10.	First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994	6
Table 11.	Births with Selected Maternal Characteristics, 1990-1994	7
Figure 3.	Percent of Births to Teens (<20) and Unmarried Women, 1994	7
Table 12.	Births with Selected Maternal Characteristics by Age, 1994	8
Figure 4.	Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994	8
Table 13.	Reported Pregnancies and Births, 1992-94 Annual Average	9
Table 14.	Selected Risk Factors Related to Infant Mortality, 1994	9

INFANT MORTALITY

Table 15.	Number of Infant Deaths, 1990-1994	10
Table 16.	Five-Year Average Infant Mortality, 1990-1994	10

HEALTH SERVICES

Table 17.	Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1994	11
Table 18.	Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994	11
Table 19.	Number of Preventable Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994	12
Table 20.	Participation in Special Health Programs, 1994	13

TECHNICAL NOTES

- Table 5. Excludes births to mothers whose age was not specified.
- Table 7-12. Rates and percentages are based on the births for which maternal and infant characteristics depicted in the table are known. For example, the percent of births to mothers who smoked during pregnancy (Table 12) is based on births for which maternal smoking status was known.
- Table 8. No rates are shown for births to mothers less than 15 years old, nor are births to these mother reflected in the total.
- Table 9. The “Other” race category in these *Profiles* is limited to births to mothers whose race was not specified.
- Table 10. Mothers with “less than high school” education are those who completed less than 12 years of schooling.

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1. Population of Women Ages 15-44, 1990-1994

Age	1990	1991	1992	1993	1994
15-19	31,849	30,660	30,870	31,110	32,240
20-24	39,682	39,820	39,130	35,820	31,710
25-29	46,275	44,360	42,850	41,290	35,590
30-34	44,939	45,080	44,820	45,200	44,740
35-39	37,937	38,840	39,540	41,070	43,330
40-44	31,429	33,620	33,900	35,290	38,580
Total	232,111	232,380	231,110	229,780	226,190

Source: 1990 data are from the 1990 Census of Population and Housing; 1991-1994 estimates are from the Wisconsin Center for Health Statistics.

The number of Wisconsin women in their childbearing years (ages 15-44) has increased since 1990. While most (62) counties have experienced net increases, 9 counties have had net declines in the number of women ages 15-44.

Table 2. Poverty Status of Women Ages 18-44, 1989

Age	Percent in Poverty		County Rank:		
	County	State	Low	Average	High
18-24	26.9	23.8		x	
25-44	15.2	9.7			x
Total 18-44	17.9	13.0			x

Source: 1990 Census of Population and Housing.

Note: Poverty is defined by the federal government and measured by household income and size. The percent distribution of poverty by county determines the county rank. A county is "low" if it is in the lowest quartile (# 14.8 for age group 18-24; # 8.1 for age group 25-44; # 10.1 for age group 18-44), or "high" if it is in the highest quartile (\$ 28.4 for age group 18-24; \$ 15.2 for age group 25-44; \$ 16.3 for age group 18-44).

In half of Wisconsin counties, between 11 and 16 percent of women ages 18-44 had incomes below poverty, according to the 1990 U.S. Census.

BIRTHS AND FERTILITY RATES**Table 3. Total Births and Birth Rates, 1990-1994**

Year	Number of Births	Crude Birth Rate	General Fertility Rate	Teen Birth Rate
1990	17,013	17.7	73.3	85.6
1991	16,686	17.3	71.8	88.0
1992	16,547	17.1	71.6	86.3
1993	16,076	16.6	70.0	83.0
1994	15,538	16.0	68.7	77.6

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: The crude birth rate (CBR) is defined as the number of births in a given year divided by the number of people in the population (per 1,000). The general fertility rate (GFR) is defined as the number of births in a given year divided by the population of women ages 15-44 (per 1,000). The teen birth rate (TBR) is defined as the number of births to teens 15-19 divided by the population of females ages 15-19 (per 1,000).

Since 1990, annual declines have occurred statewide in total births, the crude birth rate and the general fertility rate. The Wisconsin teen birth rate has ranged between a high of 44 in 1991 and a low of 39 in 1994.

Table 4. Comparison of Birth Rates, 1994

	Birth Rate:		County Rank:		
	County	State	Low	Average	High
Crude Birth Rate	16.0	13.4			x
General Fertility Rate	68.7	59.9			x
Teen Birth Rate	77.6	38.8			x

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: The distribution of birth rates by county determines the county rank. A county is "low" if it is in the lowest quartile (CBR # 11.3; GFR # 54.3; TBR # 26.0), or "high" if it is in the highest quartile (CBR \$ 13.1; GFR \$ 64.1; TBR \$ 46.5).

In 54 counties, at least 20 births occurred in which the mother was a teen (aged 19 or younger). One-fourth of the counties had a 1994 teen birth rate of 26 per 1,000 or below (the lowest quartile). Another fourth had a rate of 46 per 1,000 or higher (the highest quartile).

Table 5. Comparison of Age-Specific Birth Rates, 1992-1994 Averages

Age	Average Annual Number of Births	Birth Rate:		County Rank:		
		County	State	Low	Average	High
<15	94	---	---	---	---	---
15-19	2,583	82.2	40.6			x
15-17	1,058	55.4	23.6			x
18-19	1,525	124.0	67.1			x
20-34	11,863	98.5	97.2	x		
35+	1,513	19.6	17.7			x
Total	16,053	69.7	61.0			

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group. The distribution of birth rates by county determines the county rank. A county is "low" if it is in the lowest quartile (# 26.0 for ages 15-19; # 12.6 for ages 15-17; # 47.4 for ages 18-19; # 98.5 for ages 20-34 ; # 13.5 for ages 35 and above), or "high" if it is in the highest quartile (\$ 44.6 for ages 15-19; \$ 24.9 for ages 15-17; \$ 79.5 for ages 18-19; \$ 111.3 for ages 20-34; \$ 17.7 for 15-17 35 and above).

Statewide, most births (79 percent in 1994) are to women in their twenties and early thirties. In counties with relatively high birth rates for this age group, the rates ranged from 111 to 325 (per 1,000 women aged 20-34).

Table 6. Age-Specific Birth Rates, Three-Year Averages

Age	1990-1992	1991-1993	1992-1994
15-19	86.6	85.7	82.2
15-17	59.2	57.7	55.4
18-19	124.1	127.4	124.0
20-34	97.6	97.2	98.5
35+	19.1	19.3	19.6

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group.

Wisconsin birth rates have declined since 1990 for women in all age groups except those age 30 and above.

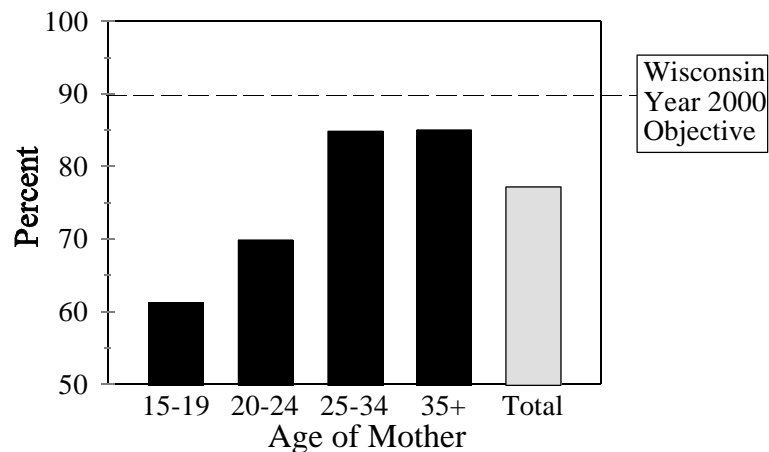
MATERNAL AND INFANT CHARACTERISTICS

Table 7. First Prenatal Care Visit and Low Birthweight, 1990-1994

Year	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
	N	%	N	%	N	%
1990	12,881	75.8	1,065	6.3	1,462	8.6
1991	12,462	74.7	1,037	6.2	1,453	8.7
1992	12,478	75.5	972	5.9	1,439	8.7
1993	12,189	75.9	980	6.1	1,442	9.0
1994	11,955	77.0	931	6.0	1,435	9.2

Source: Birth certificates, Wisconsin Center for Health Statistics.

In relatively small proportions of Wisconsin births each year, prenatal care was begun during the third trimester or not at all.

Figure 1. Percent of Women Obtaining First-Trimester Prenatal Care, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

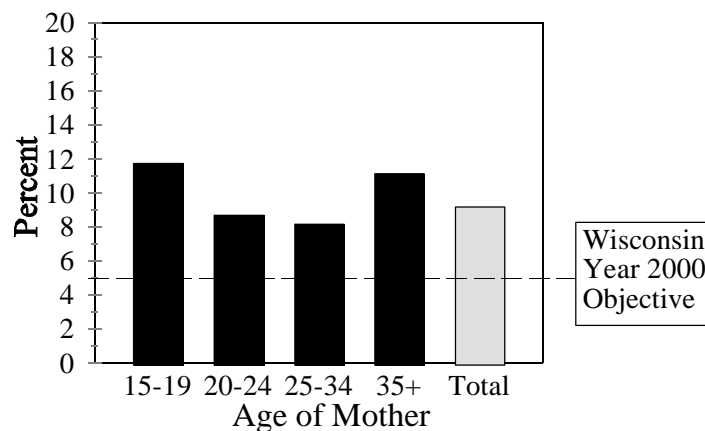
Since 1990, the proportion of Wisconsin women who received first-trimester prenatal care has been 82 or 83 percent each year.

Table 8. First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994

Age	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
15-19	2,502	1,533	61.3	233	9.3	293	11.7
20-24	3,988	2,782	69.8	308	7.7	346	8.7
25-34	7,355	6,242	84.9	310	4.2	600	8.2
35+	1,602	1,361	85.0	63	3.9	178	11.1
Total	15,447	11,918	77.2	914	5.9	1417	9.2

Source: Birth certificates, Wisconsin Center for Health Statistics.

Statewide, late or no prenatal care is generally more prevalent among very young women who give birth than among older women. Infants born to teenagers are also more likely to have a birthweight less than 2,500 grams (5.5 pounds).

Figure 2. Percent of Births with Low Birthweight (<2500 Grams), 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In 1994, a total of 4,358 infants (6.4 percent of live births) were born in Wisconsin with low birthweight. Low birthweight occurred most frequently among births to teens (9 percent of all births in the age group); women age 35 and older had the second highest proportion (almost 7 percent).

Table 9. First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994

Race/ Ethnicity	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
White	7,994	7,140	89.4	154	1.9	486	6.1
Black	5,679	3,567	62.8	631	11.1	823	14.5
Am. Indian	110	82	74.5	12	10.9	7	6.4
Hispanic	1,259	877	69.7	92	7.3	94	7.5
Asian	496	289	58.3	42	8.5	25	5.0
Other	0	---	---	---	---	---	---

In 1994, statewide there were 56,451 births to white women, 6,812 births to African-American women, 2,398 births to Hispanic women, 1,839 births to Asian women (of which 1,230 births were to Laotian/Hmong women), and 750 births to American Indian women.

Source: Birth certificates, Wisconsin Center for Health Statistics.

Note: All live births were classified into mutually exclusive categories: non-Hispanic white, non-Hispanic black, Hispanic, non-Hispanic Asian, non-Hispanic American Indian, non-Hispanic other. Characteristics are not shown for fewer than 20 births.

Table 10. First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994

Years of Education	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
Less than High School	4,596	2,730	59.4	531	11.6	590	12.8
High School	4,944	3,836	77.6	282	5.7	455	9.2
More than High School	5,992	5,386	89.9	116	1.9	389	6.5

Women with higher levels of education are more likely to receive prenatal care during the first trimester of pregnancy; their infants are also much less likely to have low birthweight.

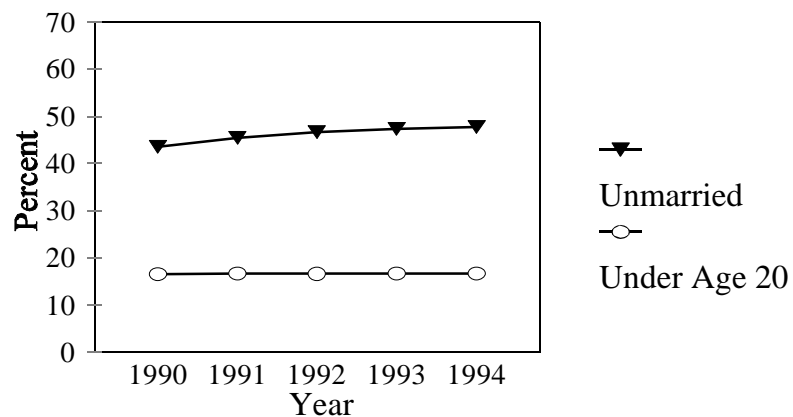
Source: Birth certificates, Wisconsin Center for Health Statistics.

Table 11. Births with Selected Maternal Characteristics, 1990-1994

Year	First Birth		Unmarried		< 12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%	N	%
1990	6,421	37.7	7,416	43.6	4,887	28.7	4,339	25.5
1991	6,236	37.4	7,586	45.5	4,817	28.9	4,155	24.9
1992	6,165	37.3	7,723	46.7	4,845	29.3	3,888	23.5
1993	5,904	36.7	7,612	47.4	4,756	29.6	3,572	22.2
1994	5,864	37.7	7,413	47.7	4,596	29.6	3,259	21.0

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of Wisconsin women who smoke during pregnancy has declined about 1 percentage point annually since 1990.

Figure 3. Percent of Births to Teens (<20) and Unmarried Women, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

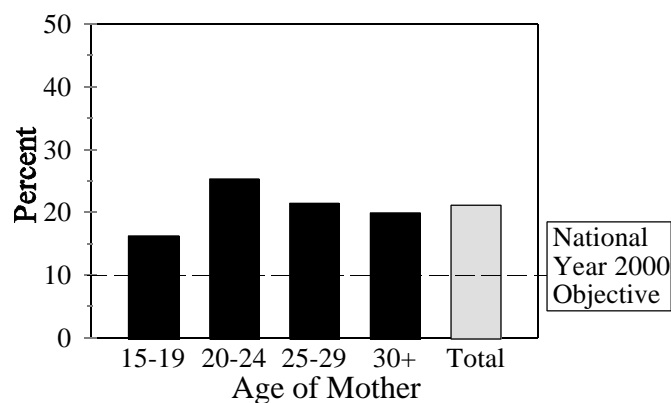
The long-term increase in the proportion of births to unmarried mothers continued during the 1990s. Infants born to unmarried women represented 24 percent of all Wisconsin births in 1990; by 1994, they were 27 percent of all births.

Table 12. Births with Selected Maternal Characteristics by Age, 1994

Age	Unmarried		<12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%
15-19	2,316	92.6	1,876	75.0	404	16.2
20-24	2,702	67.8	1,405	35.2	1,009	25.3
25-29	1,257	31.6	642	16.1	853	21.4
30+	1,048	21.1	583	11.7	989	19.9

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of infants born to unmarried women was 25 percent or greater in one-fourth of Wisconsin counties. In most counties, the proportion of nonmarital births was higher among younger women.

Figure 4. Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In general, older women are less likely to smoke during pregnancy than younger women. In 1994, 27 percent of Wisconsin teens ages 15-19 who gave birth smoked during their pregnancies, compared with 15 percent of women ages 30 and older.

**Table 13. Reported Pregnancies and Births, 1992-94
Annual Average**

Age	Reported Pregnancies	Number of Births
Less than 20	3,792	2,677
20+	17,885	13,376
Total	21,677	16053

Source: Birth certificates, reported induced abortions and reported fetal deaths, Wisconsin Center for Health Statistics.

Note: The number of reported pregnancies is the sum of the number of live births, reported fetal deaths, and reported induced abortions. The number of reported pregnancies underestimates the actual number of pregnancies because it does not include miscarriages. Pregnancies from border counties may also be underestimated because of limited reporting by out-of-state facilities.

The proportion of pregnancies that result in a live birth is generally higher for women over 20 than for younger women.

Table 14. Selected Factors Related to Infant Mortality, 1994

Risk	Percent of Births:		County Rank:		
	County	State	Low	Average	High
Low Birthweight	9.2	6.4			x
Mother Age Less than 20	16.7	10.3			x
Prenatal Care:					
Third Trimester or None	6.0	3.5			x
Fewer than 5 Prenatal Visits	7.7	4.1			x
5-9 Prenatal Visits	19.4	18.5		x	

Source: Birth certificates, Wisconsin Center for Health Statistics.

Note: The percent distribution of a given risk characteristic by county determines the county rank. A county is "low" if it is in the lowest quartile (# 4.6 for low birthweight; # 7.5 for mother under age 20; # 2.1 for third trimester or no prenatal care; # 2.2 for fewer than 5 prenatal care visits; # 15.1 for 5 to 9 prenatal care visits), or "high" if it is in the highest quartile (\$ 6.1 for low birthweight; \$ 11.5 for mother under age 20; \$ 4.3 for third trimester or no prenatal care; \$ 5.6 for fewer than 5 prenatal care visits; \$ 28.6 for 5 to 9 prenatal care visits).

In Wisconsin, 81.4 percent of births were to mothers with 10 or more prenatal care visits.

INFANT MORTALITY

Table 15. Number of Infant Deaths, 1990-1994

Year	Neonatal Deaths	Postneonatal Deaths	Total Infant Deaths
1990	106	84	190
1991	89	83	172
1992	101	57	158
1993	98	70	168
1994	118	69	187

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Neonatal deaths are those that occurred at less than four weeks (28 days) of age. Postneonatal deaths are those that occurred between four weeks and one year of age.

There were 541 infant deaths in Wisconsin in 1994, representing a statewide infant mortality rate of 7.9 deaths per 1,000 births. Most (60 percent) infant deaths occurred within the first 4 weeks of life, the neonatal period.

Table 16. Five-Year Average Infant Mortality, 1990-1994

	Average Annual Number of Deaths	Infant Mortality Rate: County	Infant Mortality Rate: State	County Rank: Low	County Rank: Average	County Rank: High
Total Infant	175.0	10.7	8.0			x
Neonatal	102.4	6.3	4.8			x
Postneonatal	72.6	4.4	3.2			x

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 births and are not calculated when the number of deaths during the five-year period is fewer than 20. The distribution of a given rate by county determines the county rank. The number of counties ranked was 31 for total infant deaths, 20 for neonatal deaths, and 10 for postneonatal deaths. A county is "low" if it is in the lowest quartile (# 6.3 for total infant deaths; # 3.9 for neonatal deaths; # 2.6 for postneonatal deaths), or "high" if it is in the highest quartile (\$ 9.0 for total infant deaths; \$ 5.1 for neonatal deaths; \$ 4.4 for postneonatal deaths).

Thirty-one counties had at least 20 infant deaths during the five-year period 1990-1994. Of these, eight counties had an infant mortality rate of 9 per 1,000 births or higher.

HEALTH SERVICES

Table 17. Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1993

	Source of Payment		
	Medical Assistance	Other Pay Sources	All Sources
<u>Average Length of Stay (days)</u>			
Low Birthweight	16	11	15
All Other	2	2	2
<u>Average Charge</u>			
Low Birthweight	\$18,509	\$11,656	\$16,734
All Other	\$1,508	\$1,250	\$1,383

Source: Linked file of birth certificates, hospital discharges and Medical Assistance eligibility data, Wisconsin Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included. Average charge excludes physician charge.

Table 18. Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		
	Medical Assistance	Other Pay Source	All Sources
Neonatal Disorders (760-779)	137	177	314
Acute Respiratory Infection (460-466)	298	140	438
Viral or Other Infection (010-089, 100-139)	200	66	266
Pneumonia (480-486)	89	26	115
Congenital Anomalies (740-759)	85	84	169
Injuries (800-999)	71	22	93
All Other	967	374	1,341
Total	1,847	889	2,736

Source: Infant hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Includes all hospitalizations of infants less than one year of age, excluding newborns; counts are based on first-listed diagnosis. Hospitalizations that occurred out-of-state are not included.

Statewide, 1994 newborn hospital stays averaged 13 days for low birthweight infants, compared with 2 days for other infants. Average hospital costs for a newborn were more than \$15,300 for a low birthweight infant versus about \$1,200 for other infants.

Neonatal disorders (a wide variety of conditions originating in the perinatal period) and acute respiratory infections together accounted for about one-third of all 1994 infant hospitalizations in Wisconsin.

Table 19. Number of Preventable Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		All Sources
	Medical Assistance	Other Pay Source	
Bacterial Pneumonia (481 ,482.2, 482.3, 482.9, 483, 485, 486)*	67	20	87
Severe Ear, Nose, Throat Infection (382, 462, 463, 465, 472.1)*	74	32	106
Asthma (493)	67	7	74
Gastroenteritis (558.9)	43	11	54
Dehydration (276.5)	159	83	242
All Other Preventable	148	50	198
Total Preventable	558	203	761

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: "Preventable hospitalizations" include all hospitalizations for 28 conditions that have been defined as ambulatory-care-sensitive. Hospitalizations for these conditions are potentially preventable, in that timely and appropriate preventive and primary care can decrease hospitalizations by: (1) preventing the onset of an illness or condition, (2) controlling an acute episodic illness or condition, or (3) managing a chronic disease or condition. Accordingly, the number of preventable hospitalizations can be used to indicate problems with access, availability and adequacy of preventive and primary care. This table includes all hospitalizations for the defined conditions among infants under one year of age. Hospitalizations that occurred out-of-state are not included.

*Bacterial pneumonia excludes cases with secondary diagnosis of sickle cell anemia and patients less than 2 months old. Severe ear, nose and throat infections exclude cases with insertion of myringotomy tubes.

During 1994, there were 9,797 hospitalizations of infants (excluding deliveries) in Wisconsin. Of these, 27 percent (2,681) were for conditions in which a hospital stay is potentially preventable, representing a rate of 39.3 such hospitalizations per 1,000 infants.

Table 20. Participation in Special Health Programs, 1994

Population	Prenatal Care Coordination	WIC
Infants (less than 1 year)	---	10,082
Pregnant Women	3,676	3,267
Postpartum Women	---	4,144

Sources: Bureau of Health Care Financing (Prenatal Care Coordination); Wisconsin WIC Program.

Note: The Supplemental Food Program for Women, Infants, and Children (WIC) provides nutritional counseling and supplementary food for pregnant women, infants and young children at risk for poor health outcomes related to nutritional deficiencies. Prenatal Care Coordination (a Medical Assistance program administered by the DHSS Division of Health, Bureau of Health Care Financing) is the coordinated delivery of nonmedical (psychosocial, educational, and other) services to pregnant women. The program attempts to identify each woman's reproductive health needs and focuses on the prevention of poor birth outcomes. High-risk MA recipients are selected for this benefit, based on established criteria to determine high risk.

In December of 1994, 28,704 Wisconsin infants were receiving services from WIC. The number of women participating in WIC included 9,644 pregnant women and 12,830 receiving services during the year after giving birth.



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LIST OF TABLES AND FIGURES

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1.	Population of Women Ages 15-44, 1990-1994	1
Table 2.	Poverty Status of Women Ages 18-44, 1989	1

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Table 3.	Total Births and Birth Rates, 1990-1994	2
Table 4.	Comparison of Birth Rates, 1994	2
Table 5.	Comparison of Age-Specific Birth Rates, 1992-1994 Averages	3
Table 6.	Age-Specific Birth Rates, Three-Year Averages	3

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Table 7.	First Prenatal Care Visit and Low Birthweight, 1990-1994	4
Figure 1.	Percent of Women Obtaining First-Trimester Prenatal Care, 1994	4
Table 8.	First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994	5
Figure 2.	Percent of Births with Low Birthweight (<2,500 grams), 1994	5
Table 9.	First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994	6
Table 10.	First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994	6
Table 11.	Births with Selected Maternal Characteristics, 1990-1994	7
Figure 3.	Percent of Births to Teens (<20) and Unmarried Women, 1994	7
Table 12.	Births with Selected Maternal Characteristics by Age, 1994	8
Figure 4.	Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994 .	8
Table 13.	Reported Pregnancies and Births, 1992-94 Annual Average	9
Table 14.	Selected Risk Factors Related to Infant Mortality, 1994	9

INFANT MORTALITY

Table 15.	Number of Infant Deaths, 1990-1994	10
Table 16.	Five-Year Average Infant Mortality, 1990-1994	10

HEALTH SERVICES

Table 17.	Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1994	11
Table 18.	Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994	11
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Table 9. The “Other” race category in these *Profiles* is limited to births to mothers whose race was not specified.

Table 10. Mothers with “less than high school” education are those who completed less than 12 years of schooling.

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1. Population of Women Ages 15-44, 1990-1994

Age	1990	1991	1992	1993	1994
15-19	22,514	22,453	22,463	22,470	22,454
20-24	29,259	27,195	27,208	27,216	27,196
25-29	32,032	32,133	32,148	32,158	32,135
30-34	29,796	29,504	29,518	29,527	29,506
35-39	24,435	25,714	25,726	25,734	25,716
40-44	19,097	20,567	20,577	20,583	20,569
Total	157,133	157,566	157,640	157,687	157,575

Source: 1990 data are from the 1990 Census of Population and Housing; 1991-1994 estimates are from the Wisconsin Center for Health Statistics.

The number of Wisconsin women in their childbearing years (ages 15-44) has increased since 1990. While most (62) counties have experienced net increases, 9 counties have had net declines in the number of women ages 15-44.

Table 2. Poverty Status of Women Ages 18-44, 1989

Age	Percent in Poverty City	State	Low	City is: Average	High
18-24	Data for this table are not available below the county level.				
25-44					
Total 18-44					

Source: 1990 Census of Population and Housing.

In half of Wisconsin counties, between 11 and 16 percent of women ages 18-44 had incomes below poverty, according to the 1990 U.S. Census.

BIRTHS AND FERTILITY RATES**Table 3. Total Births and Birth Rates, 1990-1994**

Year	Number of Births	Crude Birth Rate	General Fertility Rate	Teen Birth Rate
1990	12,799	20.4	81.5	114.1
1991	12,598	20.0	80.0	112.6
1992	12,431	19.7	78.9	112.2
1993	12,180	19.3	77.2	106.8
1994	11,746	18.7	74.5	103.3

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: The crude birth rate (CBR) is defined as the number of births in a given year divided by the number of people in the population (per 1,000). The general fertility rate (GFR) is defined as the number of births in a given year divided by the population of women ages 15-44 (per 1,000). The teen birth rate (TBR) is defined as the number of births to teens 15-19 divided by the population of females ages 15-19 (per 1,000).

Since 1990, annual declines have occurred statewide in total births, the crude birth rate and the general fertility rate. The Wisconsin teen birth rate has ranged between a high of 44 in 1991 and a low of 39 in 1994.

Table 4. Comparison of Birth Rates, 1994

	Birth Rate:		City is:		
	City	State	Low	Average	High
Crude Birth Rate	18.7	13.4			x
General Fertility Rate	74.5	59.9			x
Teen Birth Rate	103.3	38.8			x

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: The birth rates in the city are compared to the distribution of birth rates for the state's 72 counties. A rate is labeled "low" if the CBR # 11.3; GFR # 54.3; TBR # 26.0; or "high" if the CBR \$ 13.1; GFR \$ 64.1; TBR \$ 46.5.

In 54 counties, at least 20 births occurred in which the mother was a teen (aged 19 or younger). One-fourth of the counties had a 1994 teen birth rate of 26 per 1,000 or below (the lowest quartile). Another fourth had a rate of 46 per 1,000 or higher (the highest quartile).

Table 5. Comparison of Age-Specific Birth Rates, 1992-1994 Averages

Age	Average Annual Number of Births	Birth Rate:			City is:	
		City	State	Low	Average	High
<15	93	---	---	---	---	---
15-19	2,413	107.4	40.6			x
15-17	1,003	86.0	23.6			x
18-19	1,410	130.6	67.1			x
20-34	8,686	97.7	97.2	x		
35+	926	20.0	17.7			x
Total	12,118	76.3	61.0			

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group. The birth rates in the city are compared to the distribution of birth rates for the state's 72 counties. A rate is labeled "low" if it is # 26.0 for ages 15-19; # 12.6 for ages 15-17; # 47.4 for ages 18-19; # 98.5 for ages 20-34 ; # 13.5 for ages 35 and above; or "high" if it is \$ 44.6 for ages 15-19; \$ 24.9 for ages 15-17; \$ 79.5 for ages 18-19; \$ 111.3 for ages 20-34; \$ 17.7 for ages 35 and above.

Statewide, most births (79 percent in 1994) are to women in their twenties and early thirties. In counties with relatively high birth rates for this age group, the rates ranged from 111 to 325 (per 1,000 women aged 20-34).

Table 6. Age-Specific Birth Rates, Three-Year Averages

Age	1990-1992	1991-1993	1992-1994
15-19	113.0	110.5	107.4
15-17	87.0	87.0	86.0
18-19	141.3	136.0	130.6
20-34	102.1	100.8	97.7
35+	18.3	18.7	20.0

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group.

Wisconsin birth rates have declined since 1990 for women in all age groups except those age 30 and above.

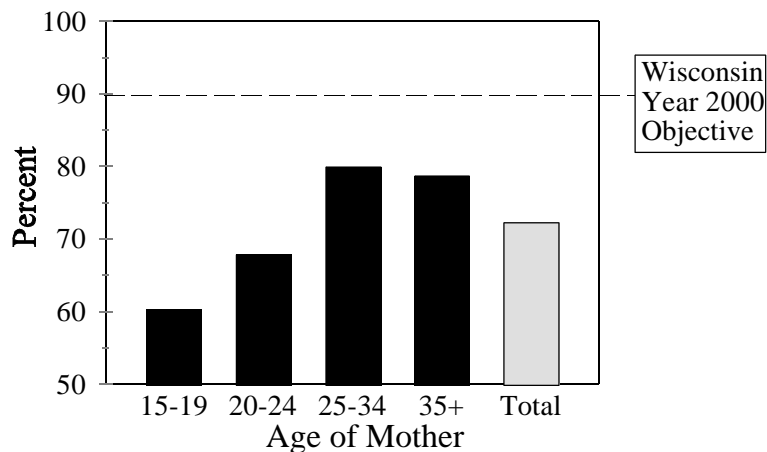
MATERNAL AND INFANT CHARACTERISTICS

Table 7. First Prenatal Care Visit and Low Birthweight, 1990-1994

Year	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
	N	%	N	%	N	%
1990	---	---	---	---	---	---
1991	---	---	---	---	---	---
1992	8,704	70.1	909	7.3	1,225	9.9
1993	8,610	70.8	922	7.6	1,270	10.4
1994	8,457	72.0	883	7.5	1,229	10.5

Source: Birth certificates, Wisconsin Center for Health Statistics.

In relatively small proportions of Wisconsin births each year, prenatal care was begun during the third trimester or not at all.

Figure 1. Percent of Women Obtaining First-Trimester Prenatal Care, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

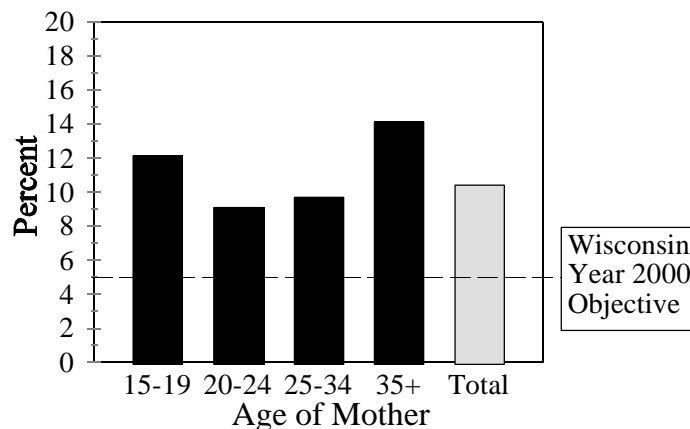
Since 1990, the proportion of Wisconsin women who received first-trimester prenatal care has been 82 or 83 percent each year.

Table 8. First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994

Age	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
15-19	2,320	1,399	60.3	230	9.9	282	12.2
20-24	3,487	2,363	67.8	292	8.4	317	9.1
25-34	4,858	3,878	79.9	291	6.0	472	9.7
35+	991	780	78.7	54	5.4	140	14.1
Total	11,656	8,420	72.3	867	7.4	1211	10.4

Source: Birth certificates, Wisconsin Center for Health Statistics.

Statewide, late or no prenatal care is generally more prevalent among very young women who give birth than among older women. Infants born to teenagers are also more likely to have a birthweight less than 2,500 grams (5.5 pounds).

Figure 2. Percent of Births with Low Birthweight (<2500 Grams), 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In 1994, a total of 4,358 infants (6.4 percent of live births) were born in Wisconsin with low birthweight. Low birthweight occurred most frequently among births to teens (9 percent of all births in the age group); women age 35 and older had the second highest proportion (almost 7 percent).

Table 9. First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994

Race/ Ethnicity	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
White	4,450	3,850	86.6	118	2.7	305	6.9
Black	5,597	3,503	62.6	624	11.2	807	14.4
Am. Indian	91	65	71.4	12	13.2	6	6.6
Hispanic	1,175	806	68.7	90	7.7	90	7.7
Asian	433	233	53.8	39	9.0	21	4.8
Other	0	---	---	---	---	---	---

In 1994, statewide there were 56,451 births to white women, 6,812 births to African-American women, 2,398 births to Hispanic women, 1,839 births to Asian women (of which 1,230 births were to Laotian/Hmong women), and 750 births to American Indian women.

Source: Birth certificates, Wisconsin Center for Health Statistics.

Note: All live births were classified into mutually exclusive categories: non-Hispanic white, non-Hispanic black, Hispanic, non-Hispanic Asian, non-Hispanic American Indian, non-Hispanic other. Characteristics are not shown for fewer than 20 births.

Table 10. First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994

Years of Education	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
Less than High School	4,359	2,555	58.6	523	12.0	568	13.0
High School	3,880	2,883	74.3	260	6.7	398	10.3
More than High School	3,501	3,016	86.2	98	2.8	262	7.5

Women with higher levels of education are more likely to receive prenatal care during the first trimester of pregnancy; their infants are also much less likely to have low birthweight.

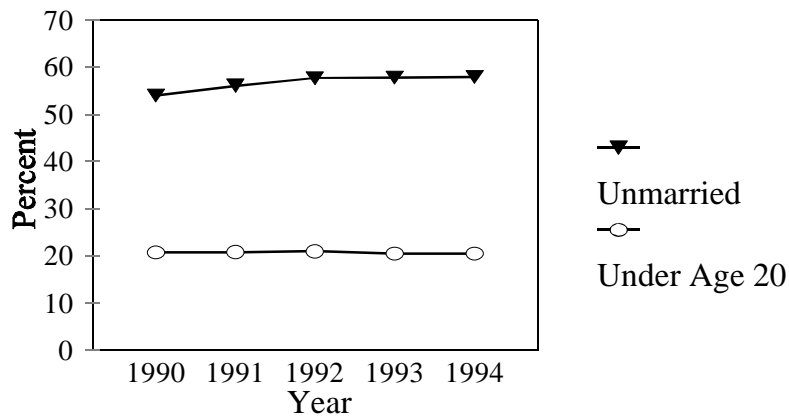
Source: Birth certificates, Wisconsin Center for Health Statistics.

Table 11. Births with Selected Maternal Characteristics, 1990-1994

Year	First Birth		Unmarried		< 12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%	N	%
1990	4,653	36.4	6,909	54.0	4,622	36.1	3,628	28.4
1991	4,602	36.5	7,069	56.1	4,581	36.4	3,425	27.2
1992	4,449	35.8	7,176	57.7	4,611	37.1	3,259	26.2
1993	4,278	35.1	7,050	57.9	4,519	37.1	2,978	24.5
1994	4,291	36.5	6,814	58.0	4,359	37.1	2,693	22.9

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of Wisconsin women who smoke during pregnancy has declined about 1 percentage point annually since 1990.

Figure 3. Percent of Births to Teens (<20) and Unmarried Women, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

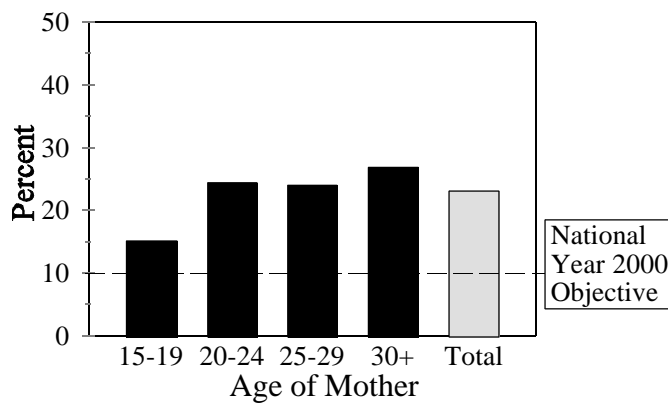
The long-term increase in the proportion of births to unmarried mothers continued during the 1990s. Infants born to unmarried women represented 24 percent of all Wisconsin births in 1990; by 1994, they were 27 percent of all births.

Table 12. Births with Selected Maternal Characteristics by Age, 1994

Age	Unmarried		<12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%
15-19	2,160	93.1	1,774	76.5	351	15.1
20-24	2,494	71.5	1,337	38.4	851	24.4
25-29	1,130	39.9	608	21.5	677	23.9
30+	941	31.2	551	18.3	811	26.9

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of infants born to unmarried women was 25 percent or greater in one-fourth of Wisconsin counties. In most counties, the proportion of nonmarital births was higher among younger women.

Figure 4. Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In general, older women are less likely to smoke during pregnancy than younger women. In 1994, 27 percent of Wisconsin teens ages 15-19 who gave birth smoked during their pregnancies, compared with 15 percent of women ages 30 and older.

**Table 13. Reported Pregnancies and Births, 1992-94
Annual Average**

Age	Reported Pregnancies	Number of Births
Less than 20	Data for this table are not available below the county level.	
20+		
Total		

Source: Birth certificates, reported induced abortions and reported fetal deaths, Wisconsin Center for Health Statistics.

The proportion of pregnancies that result in a live birth is generally higher for women over 20 than for younger women.

Table 14. Selected Factors Related to Infant Mortality, 1994

Risk	Percent of Births:		City is:		
	City	State	Low	Average	High
Low Birthweight	10.5	6.4			x
Mother Age Less than 20	20.5	10.3			x
Prenatal Care:					
Third Trimester or None	7.5	3.5			x
Fewer than 5 Prenatal Visits	9.8	4.1			x
5-9 Prenatal Visits	22.4	18.5		x	

Source: Birth certificates, Wisconsin Center for Health Statistics.

Note: The percentage of a given risk characteristic in a city is compared to the percent distribution of that characteristic for the state's 72 counties. A percentage is labeled "low" if it is # 4.6 for low birthweight; # 7.5 for mother under age 20; # 2.1 for third trimester or no prenatal care; # 2.2 for fewer than 5 prenatal care visits; # 15.1 for 5 to 9 prenatal care visits; or "high" if it is \$ 6.1 for low birthweight; \$ 11.5 for mother under age 20; \$ 4.3 for third trimester or no prenatal care; \$ 5.6 for fewer than 5 prenatal care visits; \$ 28.6 for 5 to 9 prenatal care visits.

In Wisconsin, 81.4 percent of births were to mothers with 10 or more prenatal care visits.

INFANT MORTALITY

Table 15. Number of Infant Deaths, 1990-1994

Year	Neonatal Deaths	Postneonatal Deaths	Total Infant Deaths
1990	87	78	165
1991	69	73	142
1992	86	50	136
1993	77	63	140
1994	96	58	154

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Neonatal deaths are those that occurred at less than four weeks (28 days) of age. Postneonatal deaths are those that occurred between four weeks and one year of age.

There were 541 infant deaths in Wisconsin in 1994, representing a statewide infant mortality rate of 7.9 deaths per 1,000 births. Most (60 percent) infant deaths occurred within the first 4 weeks of life, the neonatal period.

Table 16. Five-Year Average Infant Mortality, 1990-1994

	Average Annual Number of Deaths	Infant Mortality Rate: City	State	Low	City is: Average	High
Total Infant	147.4	11.9	8.0			x
Neonatal	83.0	6.7	4.8			x
Postneonatal	64.4	5.2	3.2			x

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 births. The infant mortality rates in a city are compared to the distribution of rates among the counties which had 20 or more infant deaths in the five-year period (31 counties for total infant deaths, 20 for neonatal deaths, and 10 for postneonatal deaths). A city rate is "low" if it is # 6.3 for total infant deaths; # 3.9 for neonatal deaths; # 2.6 for postneonatal deaths; or "high" if it is \$ 9.0 for total infant deaths; \$5.1 for neonatal deaths; \$ 4.4 for postneonatal deaths.

Thirty-one counties had at least 20 infant deaths during the five-year period 1990-1994. Of these, eight counties had an infant mortality rate of 9 per 1,000 births or higher.

HEALTH SERVICES

Table 17. Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1993

	Source of Payment		
	Medical Assistance	Other Pay Sources	All Sources
<u>Average Length of Stay (days)</u>			
Low Birthweight	16	12	15
All Other	2	2	2
<u>Average Charge</u>			
Low Birthweight	\$17,972	\$12,324	\$16,844
All Other	\$1,525	\$1,304	\$1,446

Source: Linked file of birth certificates, hospital discharges and Medical Assistance eligibility data, Wisconsin Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included. Average charge excludes physician charge.

Table 18. Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		
	Medical Assistance	Other Pay Source	All Sources
Neonatal Disorders (760-779)	114	85	199
Acute Respiratory Infection (460-466)	274	82	356
Viral or Other Infection (010-089, 100-139)	184	38	222
Pneumonia (480-486)	84	21	105
Congenital Anomalies (740-759)	74	33	107
Injuries (800-999)	63	16	79
All Other	898	215	1,113
Total	1,691	490	2,181

Source: Infant hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Includes all hospitalizations of infants less than one year of age, excluding newborns; counts are based on first-listed diagnosis. Hospitalizations that occurred out-of-state are not included.

Statewide, 1994 newborn hospital stays averaged 13 days for low birthweight infants, compared with 2 days for other infants. Average hospital costs for a newborn were more than \$15,300 for a low birthweight infant versus about \$1,200 for other infants.

Neonatal disorders (a wide variety of conditions originating in the perinatal period) and acute respiratory infections together accounted for about one-third of all 1994 infant hospitalizations in Wisconsin.

Table 19. Number of Preventable Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		All Sources
	Medical Assistance	Other Pay Source	
Bacterial Pneumonia (481 ,482.2, 482.3, 482.9, 483, 485, 486)*	64	16	80
Severe Ear, Nose, Throat Infection (382, 462, 463, 465, 472.1)*	69	19	88
Asthma (493)	63	6	69
Gastroenteritis (558.9)	40	6	46
Dehydration (276.5)	150	38	188
All Other Preventable	140	25	165
Total Preventable	526	110	636

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: "Preventable hospitalizations" include all hospitalizations for 28 conditions that have been defined as ambulatory-care-sensitive. Hospitalizations for these conditions are potentially preventable, in that timely and appropriate preventive and primary care can decrease hospitalizations by: (1) preventing the onset of an illness or condition, (2) controlling an acute episodic illness or condition, or (3) managing a chronic disease or condition. Accordingly, the number of preventable hospitalizations can be used to indicate problems with access, availability and adequacy of preventive and primary care. This table includes all hospitalizations for the defined conditions among infants under one year of age. Hospitalizations that occurred out-of-state are not included.

*Bacterial pneumonia excludes cases with secondary diagnosis of sickle cell anemia and patients less than 2 months old. Severe ear, nose and throat infections exclude cases with insertion of myringotomy tubes.

During 1994, there were 9,797 hospitalizations of infants (excluding deliveries) in Wisconsin. Of these, 27 percent (2,681) were for conditions in which a hospital stay is potentially preventable, representing a rate of 39.3 such hospitalizations per 1,000 infants.

Table 20. Participation in Special Health Programs, 1994

Population	Prenatal Care Coordination	WIC
Infants (less than 1 year)	---	9,383
Pregnant Women	94	3,046
Postpartum Women	---	3,833

Sources: Bureau of Health Care Financing (Prenatal Care Coordination); Wisconsin WIC Program.

Note: The Supplemental Food Program for Women, Infants, and Children (WIC) provides nutritional counseling and supplementary food for pregnant women, infants and young children at risk for poor health outcomes related to nutritional deficiencies. Prenatal Care Coordination (a Medical Assistance program administered by the DHSS Division of Health, Bureau of Health Care Financing) is the coordinated delivery of nonmedical (psychosocial, educational, and other) services to pregnant women. The program attempts to identify each woman's reproductive health needs and focuses on the prevention of poor birth outcomes. High-risk MA recipients are selected for this benefit, based on established criteria to determine high risk.

In December of 1994, 28,704 Wisconsin infants were receiving services from WIC. The number of women participating in WIC included 9,644 pregnant women and 12,830 receiving services during the year after giving birth.



Pregnant Women and Infants

Provided by the Wisconsin Information for State Health Policy Program, a program funded by the Division of Health and the Robert Wood Johnson Foundation.

Comments, suggestions and requests for information may be addressed to:

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September 1995

LIST OF TABLES AND FIGURES

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1.	Population of Women Ages 15-44, 1990-1994	1
Table 2.	Poverty Status of Women Ages 18-44, 1989	1

BIRTHS AND FERTILITY RATES

Table 3.	Total Births and Birth Rates, 1990-1994	2
Table 4.	Comparison of Birth Rates, 1994	2
Table 5.	Comparison of Age-Specific Birth Rates, 1992-1994 Averages	3
Table 6.	Age-Specific Birth Rates, Three-Year Averages	3

MATERNAL AND INFANT CHARACTERISTICS

Table 7.	First Prenatal Care Visit and Low Birthweight, 1990-1994	4
Figure 1.	Percent of Women Obtaining First-Trimester Prenatal Care, 1994	4
Table 8.	First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994	5
Figure 2.	Percent of Births with Low Birthweight (<2,500 grams), 1994	5
Table 9.	First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994	6
Table 10.	First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994	6
Table 11.	Births with Selected Maternal Characteristics, 1990-1994	7
Figure 3.	Percent of Births to Teens (<20) and Unmarried Women, 1994	7
Table 12.	Births with Selected Maternal Characteristics by Age, 1994	8
Figure 4.	Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994 .	8
Table 13.	Reported Pregnancies and Births, 1992-94 Annual Average	9
Table 14.	Selected Risk Factors Related to Infant Mortality, 1994	9

INFANT MORTALITY

Table 15.	Number of Infant Deaths, 1990-1994	10
Table 16.	Five-Year Average Infant Mortality, 1990-1994	10

HEALTH SERVICES

Table 17.	Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1994	11
Table 18.	Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994	11
Table 19.	Number of Preventable Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994	12
Table 20.	Participation in Special Health Programs, 1994	13

TECHNICAL NOTES

Table 5. Excludes births to mothers whose age was not specified.

Table 7-12. Rates and percentages are based on the births for which maternal and infant characteristics depicted in the table are known. For example, the percent of births to mothers who smoked during pregnancy (Table 12) is based on births for which maternal smoking status was known.

Table 8. No rates are shown for births to mothers less than 15 years old, nor are births to these mother reflected in the total.

Table 9. The “Other” race category in these *Profiles* is limited to births to mothers whose race was not specified.

Table 10. Mothers with “less than high school” education are those who completed less than 12 years of schooling.

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1. Population of Women Ages 15-44, 1990 & 1994

Age	1990	1994
15-19	11,743	11,775
20-24	12,998	13,033
25-29	13,688	13,725
30-34	13,138	13,173
35-39	10,763	10,792
40-44	7,598	7,619
Total	69,928	70,117

Source: Central Milwaukee City is defined by the following zip codes: 53204, 53205, 53206, 53208, 53212, 53215, 53216, 53233. (These zipcodes duplicate those used to define the Milwaukee Healthy Women and Infants project area.) 1990 data are from the 1990 Census of Population and Housing. 1994 total population estimates are from Demographic Services, WI Department of Administration; 1994 estimates for specific age groups are calculated under the assumption that the age composition of the female population did not change between 1990 and 1994. Population estimates are not available below the county level for the years 1991-93.

Table 2. Poverty Status of Women Ages 18-44, 1989

Age	Central Milwaukee	Percent in Poverty City of Milwaukee	State
18-24	Data for this table are not available below the county level.		
25-44			
Total 18-44			

Source: 1990 Census of Population and Housing.

The number of Wisconsin women in their childbearing years (ages 15-44) has increased since 1990. While most (62) counties have experienced net increases, 9 counties have had net declines in the number of women ages 15-44.

In half of Wisconsin counties, between 11 and 16 percent of women ages 18-44 had incomes below poverty, according to the 1990 U.S. Census.

BIRTHS AND FERTILITY RATES**Table 3. Total Births and Birth Rates, 1990-1994**

Year	Number of Births	Crude Birth Rate	General Fertility Rate	Teen Birth Rate
1990	6,991	25.2	100.0	150.5
1991	6,904	---	---	---
1992	6,678	---	---	---
1993	6,404	---	---	---
1994	6,026	21.6	85.9	129.4

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: The crude birth rate (CBR) is defined as the number of births in a given year divided by the number of people in the population (per 1,000). The general fertility rate (GFR) is defined as the number of births in a given year divided by the population of women ages 15-44 (per 1,000). The teen birth rate (TBR) is defined as the number of births to teens 15-19 divided by the population of females ages 15-19 (per 1,000).

Since 1990, annual declines have occurred statewide in total births, the crude birth rate and the general fertility rate. The Wisconsin teen birth rate has ranged between a high of 44 in 1991 and a low of 39 in 1994.

Table 4. Comparison of Birth Rates, 1994

	Birth Rate:		
	Central Milwaukee	City of Milwaukee	State
Crude Birth Rate	21.6	18.7	13.4
General Fertility Rate	85.9	74.5	59.9
Teen Birth Rate	129.4	103.3	38.8

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

In 54 counties, at least 20 births occurred in which the mother was a teen (aged 19 or younger). One-fourth of the counties had a 1994 teen birth rate of 26 per 1,000 or below (the lowest quartile). Another fourth had a rate of 46 per 1,000 or higher (the highest quartile).

Table 5. Comparison of Age-Specific Birth Rates, 1992-1994 Averages

Age	Average Annual Number of Births	Birth Rate:		
		Central Milwaukee	City of Milwaukee	State
<15	61	---	---	---
15-19	1,524	129.4	107.4	40.6
15-17	669	108.8	86.0	23.6
18-19	855	152.1	130.6	67.1
20-34	4,015	100.5	97.7	97.2
35+	426	23.1	20.0	17.7
Total	6,026	85.1	76.3	61.0

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group.

Statewide, most births (79 percent in 1994) are to women in their twenties and early thirties. In counties with relatively high birth rates for this age group, the rates ranged from 111 to 325 (per 1,000 women aged 20-34).

Table 6. Age-Specific Birth Rates, 1990 & 1994

Age	1990	1994
15-19	150.5	129.4
15-17	119.6	108.8
18-19	184.2	152.1
20-34	120.0	100.5
35+	20.7	23.1

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group.

Wisconsin birth rates have declined since 1990 for women in all age groups except those age 30 and above.

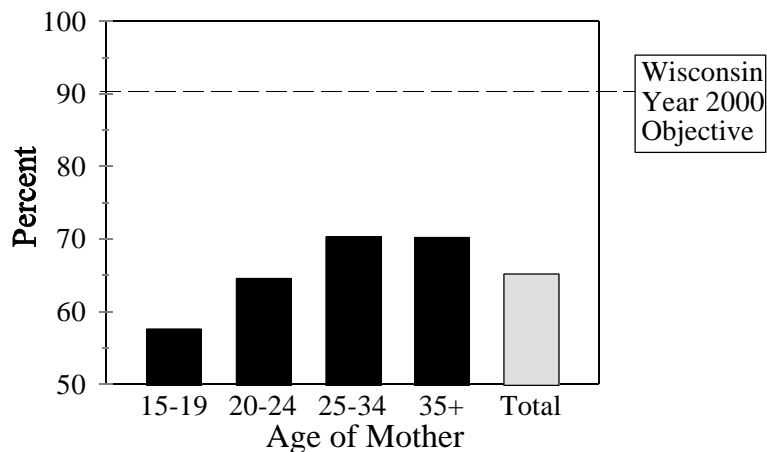
MATERNAL AND INFANT CHARACTERISTICS

Table 7. First Prenatal Care Visit and Low Birthweight, 1990-1994

Year	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
	N	%	N	%	N	%
1990	---	---	---	---	---	---
1991	---	---	---	---	---	---
1992	4,199	62.9	618	9.3	758	11.4
1993	4,040	63.1	630	9.8	763	11.9
1994	3,913	65.0	573	9.5	746	12.4

Source: Birth certificates, Wisconsin Center for Health Statistics.

In relatively small proportions of Wisconsin births each year, prenatal care was begun during the third trimester or not at all.

Figure 1. Percent of Women Obtaining First-Trimester Prenatal Care, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

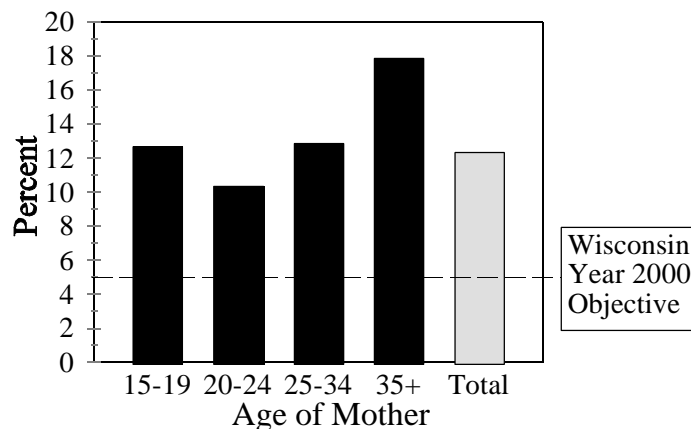
Since 1990, the proportion of Wisconsin women who received first-trimester prenatal care has been 82 or 83 percent each year.

Table 8. First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994

Age	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
15-19	1,524	879	57.7	163	10.7	193	12.7
20-24	1,975	1,275	64.6	176	8.9	204	10.3
25-34	2,040	1,434	70.3	192	9.4	262	12.8
35+	426	299	70.2	33	7.7	76	17.8
Total	5,965	3,887	65.2	564	9.5	735	12.3

Source: Birth certificates, Wisconsin Center for Health Statistics.

Statewide, late or no prenatal care is generally more prevalent among very young women who give birth than among older women. Infants born to teenagers are also more likely to have a birthweight less than 2,500 grams (5.5 pounds).

Figure 2. Percent of Births with Low Birthweight (<2500 Grams), 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In 1994, a total of 4,358 infants (6.4 percent of live births) were born in Wisconsin with low birthweight. Low birthweight occurred most frequently among births to teens (9 percent of all births in the age group); women age 35 and older had the second highest proportion (almost 7 percent).

Table 9. First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994

Race/ Ethnicity	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
White	1,310	1,045	79.8	39	3.0	101	7.7
Black	3,382	2,040	60.3	409	12.1	545	16.1
Am. Indian	59	41	69.5	9	15.3	4	6.8
Hispanic	966	641	66.4	85	8.8	81	8.4
Asian	309	146	47.2	31	10.0	15	4.9
Other	0	---	---	---	---	---	---

In 1994, statewide there were 56,451 births to white women, 6,812 births to African-American women, 2,398 births to Hispanic women, 1,839 births to Asian women (of which 1,230 births were to Laotian/Hmong women), and 750 births to American Indian women.

Source: Birth certificates, Wisconsin Center for Health Statistics.

Note: All live births were classified into mutually exclusive categories: non-Hispanic white, non-Hispanic black, Hispanic, non-Hispanic Asian, non-Hispanic American Indian, non-Hispanic other. Characteristics are not shown for fewer than 20 births.

Table 10. First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994

Years of Education	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
Less than High School	3,035	1,723	56.8	385	12.7	402	13.2
High School	1,820	1,253	68.8	143	7.9	231	12.7
More than High School	1,169	935	80.0	45	3.8	113	9.7

Women with higher levels of education are more likely to receive prenatal care during the first trimester of pregnancy; their infants are also much less likely to have low birthweight.

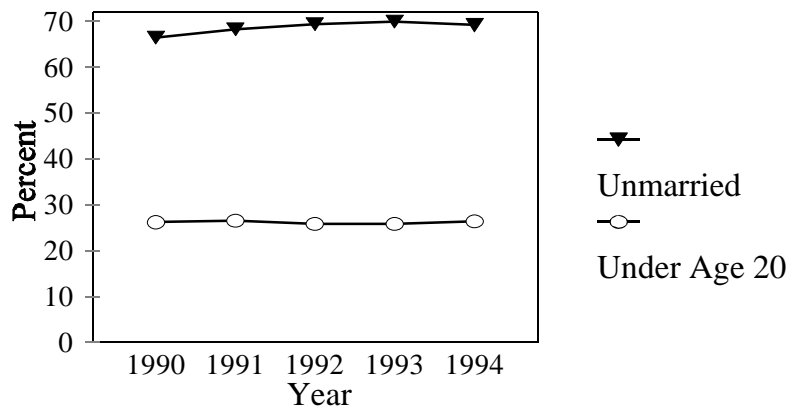
Source: Birth certificates, Wisconsin Center for Health Statistics.

Table 11. Births with Selected Maternal Characteristics, 1990-1994

Year	First Birth		Unmarried		< 12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%	N	%
1990	2,277	32.6	4,651	66.5	3,366	48.2	2,131	30.5
1991	2,203	31.9	4,714	68.3	3,375	48.9	2,031	29.4
1992	2,099	31.4	4,635	69.4	3,324	49.8	1,923	28.8
1993	1,964	30.7	4,476	69.9	3,216	50.2	1,714	26.8
1994	1,980	32.9	4,170	69.2	3,035	50.4	1,495	24.8

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of Wisconsin women who smoke during pregnancy has declined about 1 percentage point annually since 1990.

Figure 3. Percent of Births to Teens (<20) and Unmarried Women, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

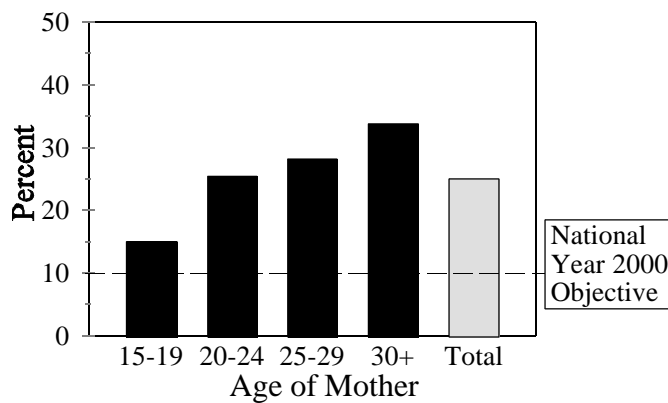
The long-term increase in the proportion of births to unmarried mothers continued during the 1990s. Infants born to unmarried women represented 24 percent of all Wisconsin births in 1990; by 1994, they were 27 percent of all births.

Table 12. Births with Selected Maternal Characteristics by Age, 1994

Age	Unmarried		<12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%
15-19	1,412	92.7	1,226	80.4	228	15.0
20-24	1,485	75.2	940	47.6	501	25.4
25-29	675	54.5	416	33.7	349	28.2
30+	537	43.7	392	31.9	414	33.7

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of infants born to unmarried women was 25 percent or greater in one-fourth of Wisconsin counties. In most counties, the proportion of nonmarital births was higher among younger women.

Figure 4. Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In general, older women are less likely to smoke during pregnancy than younger women. In 1994, 27 percent of Wisconsin teens ages 15-19 who gave birth smoked during their pregnancies, compared with 15 percent of women ages 30 and older.

**Table 13. Reported Pregnancies and Births, 1992-94
Annual Average**

Age	Reported Pregnancies	Number of Births
Less than 20	Data for this table are not available below the county level.	
20+		
Total		

Source: Birth certificates, reported induced abortions and reported fetal deaths,
Wisconsin Center for Health Statistics.

The proportion of pregnancies that result in a live birth is generally higher for women over 20 than for younger women.

Table 14. Selected Factors Related to Infant Mortality, 1994

Risk	Percent of Births:		
	Central Milwaukee	City of Milwaukee	State
Low Birthweight	12.4	10.5	6.4
Mother Age Less than 20	26.3	20.5	10.3
Prenatal Care:			
Third Trimester or None	9.5	7.5	3.5
Fewer than 5 Prenatal Visits	13.1	9.8	4.1
5-9 Prenatal Visits	27.0	22.4	18.5

Source: Birth certificates, Wisconsin Center for Health Statistics.

In Wisconsin, 81.4 percent of births were to mothers with 10 or more prenatal care visits.

INFANT MORTALITY

Table 15. Number of Infant Deaths, 1990-1994

Year	Neonatal Deaths	Postneonatal Deaths	Total Infant Deaths
1990	51	53	104
1991	33	46	79
1992	46	32	78
1993	42	37	80
1994	58	36	94

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Neonatal deaths are those that occurred at less than four weeks (28 days) of age. Postneonatal deaths are those that occurred between four weeks and one year of age.

Table 16. Five-Year Average Infant Mortality, 1990-1994

	Average Annual Number of Deaths	Infant Mortality Rate:		
		Central Milwaukee	City of Milwaukee	State
Total Infant	87.0	13.2	11.9	8.0
Neonatal	46.0	7.0	6.7	4.8
Postneonatal	40.8	6.2	5.2	3.2

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 births. Place of residence at death is first determined for Milwaukee residents from information on the death certificate. Place of residence at death is then determined for the zip code area by the mailing address given on the birth certificate.

There were 541 infant deaths in Wisconsin in 1994, representing a statewide infant mortality rate of 7.9 deaths per 1,000 births. Most (60 percent) infant deaths occurred within the first 4 weeks of life, the neonatal period.

Thirty-one counties had at least 20 infant deaths during the five-year period 1990-1994. Of these, eight counties had an infant mortality rate of 9 per 1,000 births or higher.

HEALTH SERVICES

Table 17. Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1993

	Source of Payment		
	Medical Assistance	Other Pay Sources	All Sources
<u>Average Length of Stay (days)</u>			
Low Birthweight	16	11	15
All Other	2	2	2
<u>Average Charge</u>			
Low Birthweight	\$17,225	\$11,943	\$16,639
All Other	\$1,511	\$1,398	\$1,488

Source: Linked file of birth certificates, hospital discharges and Medical Assistance eligibility data, Wisconsin Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included. Average charge excludes physician charge.

Table 18. Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		
	Medical Assistance	Other Pay Source	All Sources
Neonatal Disorders (760-779)	82	42	124
Acute Respiratory Infection (460-466)	184	39	223
Viral or Other Infection (010-089, 100-139)	126	16	142
Pneumonia (480-486)	60	7	67
Congenital Anomalies (740-759)	42	8	50
Injuries (800-999)	40	6	46
All Other	582	99	681
Total	1,116	217	1,333

Source: Infant hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Includes all hospitalizations of infants less than one year of age, excluding newborns; counts are based on first-listed diagnosis. Hospitalizations that occurred out-of-state are not included.

Statewide, 1994 newborn hospital stays averaged 13 days for low birthweight infants, compared with 2 days for other infants. Average hospital costs for a newborn were more than \$15,300 for a low birthweight infant versus about \$1,200 for other infants.

Neonatal disorders (a wide variety of conditions originating in the perinatal period) and acute respiratory infections together accounted for about one-third of all 1994 infant hospitalizations in Wisconsin.

Table 19. Number of Preventable Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		All Sources
	Medical Assistance	Other Pay Source	
Bacterial Pneumonia (481 ,482.2, 482.3, 482.9, 483, 485, 486)*	46	5	51
Severe Ear, Nose, Throat Infection (382, 462, 463, 465, 472.1)*	46	11	57
Asthma (493)	40	4	44
Gastroenteritis (558.9)	32	3	35
Dehydration (276.5)	95	16	111
All Other Preventable	90	11	101
Total Preventable	349	50	399

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: "Preventable hospitalizations" include all hospitalizations for 28 conditions that have been defined as ambulatory-care-sensitive. Hospitalizations for these conditions are potentially preventable, in that timely and appropriate preventive and primary care can decrease hospitalizations by: (1) preventing the onset of an illness or condition, (2) controlling an acute episodic illness or condition, or (3) managing a chronic disease or condition. Accordingly, the number of preventable hospitalizations can be used to indicate problems with access, availability and adequacy of preventive and primary care. This table includes all hospitalizations for the defined conditions among infants under one year of age. Hospitalizations that occurred out-of-state are not included.

*Bacterial pneumonia excludes cases with secondary diagnosis of sickle cell anemia and patients less than 2 months old. Severe ear, nose and throat infections exclude cases with insertion of myringotomy tubes.

During 1994, there were 9,797 hospitalizations of infants (excluding deliveries) in Wisconsin. Of these, 27 percent (2,681) were for conditions in which a hospital stay is potentially preventable, representing a rate of 39.3 such hospitalizations per 1,000 infants.

Table 20. Participation in Special Health Programs, 1994

Population	Prenatal Care Coordination	WIC
Infants (less than 1 year)	---	6,007
Pregnant Women	---	2,010
Postpartum Women	---	2,505

Sources: Bureau of Health Care Financing (Prenatal Care Coordination); Wisconsin WIC Program.

Note: The Supplemental Food Program for Women, Infants, and Children (WIC) provides nutritional counseling and supplementary food for pregnant women, infants and young children at risk for poor health outcomes related to nutritional deficiencies. Prenatal Care Coordination (a Medical Assistance program administered by the DHSS Division of Health, Bureau of Health Care Financing) is the coordinated delivery of nonmedical (psychosocial, educational, and other) services to pregnant women. The program attempts to identify each woman's reproductive health needs and focuses on the prevention of poor birth outcomes. High-risk MA recipients are selected for this benefit, based on established criteria to determine high risk.

In December of 1994, 28,704 Wisconsin infants were receiving services from WIC. The number of women participating in WIC included 9,644 pregnant women and 12,830 receiving services during the year after giving birth.



Pregnant Women and Infants

Provided by the Wisconsin Information for State Health Policy Program, a program funded by the Division of Health and the Robert Wood Johnson Foundation.

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September 1995

LIST OF TABLES AND FIGURES

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1.	Population of Women Ages 15-44, 1990-1994	1
Table 2.	Poverty Status of Women Ages 18-44, 1989	1

BIRTHS AND FERTILITY RATES

Table 3.	Total Births and Birth Rates, 1990-1994	2
Table 4.	Comparison of Birth Rates, 1994	2
Table 5.	Comparison of Age-Specific Birth Rates, 1992-1994 Averages	3
Table 6.	Age-Specific Birth Rates, Three-Year Averages	3

MATERNAL AND INFANT CHARACTERISTICS

Table 7.	First Prenatal Care Visit and Low Birthweight, 1990-1994	4
Figure 1.	Percent of Women Obtaining First-Trimester Prenatal Care, 1994	4
Table 8.	First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994	5
Figure 2.	Percent of Births with Low Birthweight (<2,500 grams), 1994	5
Table 9.	First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994	6
Table 10.	First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994	6
Table 11.	Births with Selected Maternal Characteristics, 1990-1994	7
Figure 3.	Percent of Births to Teens (<20) and Unmarried Women, 1994	7
Table 12.	Births with Selected Maternal Characteristics by Age, 1994	8
Figure 4.	Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994 .	8
Table 13.	Reported Pregnancies and Births, 1992-94 Annual Average	9
Table 14.	Selected Risk Factors Related to Infant Mortality, 1994	9

INFANT MORTALITY

Table 15.	Number of Infant Deaths, 1990-1994	10
Table 16.	Five-Year Average Infant Mortality, 1990-1994	10

HEALTH SERVICES

Table 17.	Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1994	11
Table 18.	Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994	11
Table 19.	Number of Preventable Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994	12
Table 20.	Participation in Special Health Programs, 1994	13

TECHNICAL NOTES

Table 5. Excludes births to mothers whose age was not specified.

Table 7-12. Rates and percentages are based on the births for which maternal and infant characteristics depicted in the table are known. For example, the percent of births to mothers who smoked during pregnancy (Table 12) is based on births for which maternal smoking status was known.

Table 8. No rates are shown for births to mothers less than 15 years old, nor are births to these mother reflected in the total.

Table 9. The “Other” race category in these *Profiles* is limited to births to mothers whose race was not specified.

Table 10. Mothers with “less than high school” education are those who completed less than 12 years of schooling.

DEMOGRAPHICS OF WOMEN OF CHILDBEARING AGE

Table 1. Population of Women Ages 15-44, 1990-1994

Age	1990	1991	1992	1993	1994
15-19	9,335	8,207	8,407	8,640	9,786
20-24	10,423	12,625	11,922	8,604	4,514
25-29	14,243	12,227	10,702	9,132	3,455
30-34	15,143	15,576	15,302	15,673	15,234
35-39	13,502	13,126	13,814	15,336	17,614
40-44	12,332	13,053	13,323	14,707	18,011
Total	74,978	74,814	73,470	72,093	68,615

Source: 1990 data are from the 1990 Census of Population and Housing; 1991-1994 estimates are from the Wisconsin Center for Health Statistics.

The number of Wisconsin women in their childbearing years (ages 15-44) has increased since 1990. While most (62) counties have experienced net increases, 9 counties have had net declines in the number of women ages 15-44.

Table 2. Poverty Status of Women Ages 18-44, 1989

Age	Percent in Poverty Area	State	Low	Area is: Average	High
18-24	Data for this table are not available below the county level.				
25-44					
Total 18-44					

Source: 1990 Census of Population and Housing.

In half of Wisconsin counties, between 11 and 16 percent of women ages 18-44 had incomes below poverty, according to the 1990 U.S. Census.

BIRTHS AND FERTILITY RATES

Table 3. Total Births and Birth Rates, 1990-1994

Year	Number of Births	Crude Birth Rate	General Fertility Rate	Teen Birth Rate
1990	4,214	12.7	56.2	16.8
1991	4,089	12.2	54.7	20.5
1992	4,116	12.2	56.0	17.0
1993	3,896	11.5	54.0	21.3
1994	3,792	11.1	55.3	18.6

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: The crude birth rate (CBR) is defined as the number of births in a given year divided by the number of people in the population (per 1,000). The general fertility rate (GFR) is defined as the number of births in a given year divided by the population of women ages 15-44 (per 1,000). The teen birth rate (TBR) is defined as the number of births to teens 15-19 divided by the population of females ages 15-19 (per 1,000).

Since 1990, annual declines have occurred statewide in total births, the crude birth rate and the general fertility rate. The Wisconsin teen birth rate has ranged between a high of 44 in 1991 and a low of 39 in 1994.

Table 4. Comparison of Birth Rates, 1994

	Birth Rate:			Area is:	
	Area	State	Low	Average	High
Crude Birth Rate	11.1	13.4	x		
General Fertility Rate	55.3	59.9		x	
Teen Birth Rate	18.6	38.8	x		

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: The birth rates in the area are compared to the distribution of birth rates for the state's 72 counties. A rate is labeled "low" if the CBR # 11.3; GFR # 54.3; TBR # 26.0; or "high" if the CBR \$ 13.1; GFR \$ 64.1; TBR \$ 46.5.

In 54 counties, at least 20 births occurred in which the mother was a teen (aged 19 or younger). One-fourth of the counties had a 1994 teen birth rate of 26 per 1,000 or below (the lowest quartile). Another fourth had a rate of 46 per 1,000 or higher (the highest quartile).

Table 5. Comparison of Age-Specific Birth Rates, 1992-1994 Averages

Age	Average Annual Number of Births	Birth Rate:			Area is:	
		Area	State	Low	Average	High
<15	1	---	---	---	---	---
15-19	170	19.0	40.6	x		
15-17	55	7.4	23.6	x		
18-19	115	76.2	67.1		x	
20-34	3,177	100.8	97.2		x	
35+	587	19.0	17.7			x
15-17	3,935	55.1	61.0			

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group. The birth rates in the area are compared to the distribution of birth rates for the state's 72 counties. A rate is labeled "low" if it is
 # 26.0 for ages 15-19; # 12.6 for ages 15-17; # 47.4 for ages 18-19; # 98.5 for ages 20-34; # 13.5 for ages 35 and above; or "high" if it is \$ 44.6 for ages 15-19; \$ 24.9 for ages 15-17; \$ 79.5 for ages 18-19; \$ 111.3 for ages 20-34; \$ 17.7 for ages 35 and above.

Statewide, most births (79 percent in 1994) are to women in their twenties and early thirties. In counties with relatively high birth rates for this age group, the rates ranged from 111 to 325 (per 1,000 women aged 20-34).

Table 6. Age-Specific Birth Rates, Three-Year Averages

Age	1990-1992	1991-1993	1992-1994
15-19	18.0	19.6	19.0
15-17	6.9	7.4	7.4
18-19	47.0	70.6	76.2
20-34	87.4	88.8	100.8
35+	20.5	20.2	19.0

Source: Birth certificates and population estimates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 women in the age group.

Wisconsin birth rates have declined since 1990 for women in all age groups except those age 30 and above.

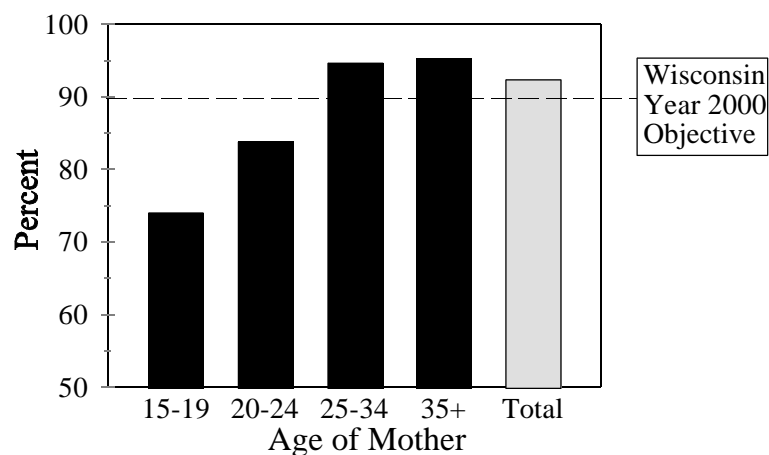
MATERNAL AND INFANT CHARACTERISTICS

Table 7. First Prenatal Care Visit and Low Birthweight, 1990-1994

Year	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
	N	%	N	%	N	%
1990	---	---	---	---	---	---
1991	---	---	---	---	---	---
1992	3,774	91.9	63	1.5	214	5.2
1993	3,579	92.0	58	1.5	172	4.4
1994	3,498	92.3	48	1.3	206	5.4

Source: Birth certificates, Wisconsin Center for Health Statistics.

In relatively small proportions of Wisconsin births each year, prenatal care was begun during the third trimester or not at all.

Figure 1. Percent of Women Obtaining First-Trimester Prenatal Care, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

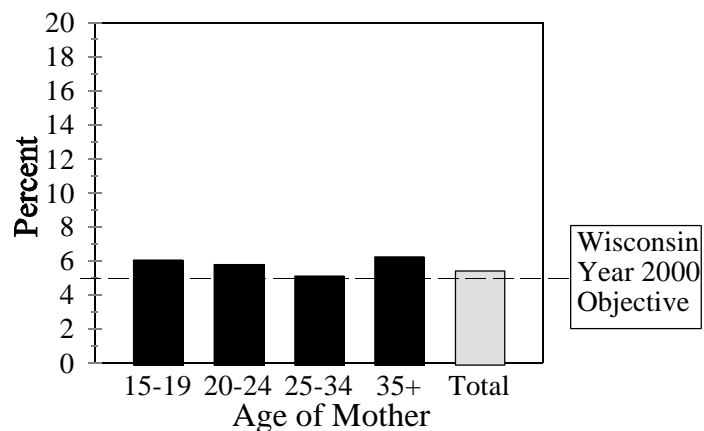
Since 1990, the proportion of Wisconsin women who received first-trimester prenatal care has been 82 or 83 percent each year.

Table 8. First Prenatal Care Visit and Low Birthweight by Age of Mother, 1994

Age	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
15-19	182	134	74.0	3	1.6	11	6.0
20-24	501	419	83.8	16	3.2	29	5.8
25-34	2,497	2,364	94.7	19	0.8	128	5.1
35+	611	581	95.2	9	1.5	38	6.2
Total	3,791	3,498	92.3	47	1.2	206	5.4

Source: Birth certificates, Wisconsin Center for Health Statistics.

Statewide, late or no prenatal care is generally more prevalent among very young women who give birth than among older women. Infants born to teenagers are also more likely to have a birthweight less than 2,500 grams (5.5 pounds).

Figure 2. Percent of Births with Low Birthweight (<2500 Grams), 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In 1994, a total of 4,358 infants (6.4 percent of live births) were born in Wisconsin with low birthweight. Low birthweight occurred most frequently among births to teens (9 percent of all births in the age group); women age 35 and older had the second highest proportion (almost 7 percent).

Table 9. First Prenatal Care Visit and Low Birthweight by Race/Ethnicity of Mother, 1994

Race/ Ethnicity	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
White	3,544	3,290	92.9	36	1.0	181	5.1
Black	82	64	79.0	7	8.6	16	19.5
Am. Indian	19	---	---	---	---	---	---
Hispanic	84	71	84.5	2	2.4	4	4.8
Asian	63	56	88.9	3	4.8	4	6.3
Other	0	---	---	---	---	---	---

In 1994, statewide there were 56,451 births to white women, 6,812 births to African-American women, 2,398 births to Hispanic women, 1,839 births to Asian women (of which 1,230 births were to Laotian/Hmong women), and 750 births to American Indian women.

Source: Birth certificates, Wisconsin Center for Health Statistics.

Note: All live births were classified into mutually exclusive categories: non-Hispanic white, non-Hispanic black, Hispanic, non-Hispanic Asian, non-Hispanic American Indian, non-Hispanic other. Characteristics are not shown for fewer than 20 births.

Table 10. First Prenatal Care Visit and Low Birthweight by Education of Mother, 1994

Years of Education	Number of Births	First Trimester		Third Trimester or None		Birthweight Less than 2,500 Grams	
		N	%	N	%	N	%
Less than High School	237	175	74.2	8	3.4	22	9.3
High School	1,064	953	89.7	22	2.1	57	5.4
More than High School	2,491	2,370	95.2	18	0.7	127	5.1

Women with higher levels of education are more likely to receive prenatal care during the first trimester of pregnancy; their infants are also much less likely to have low birthweight.

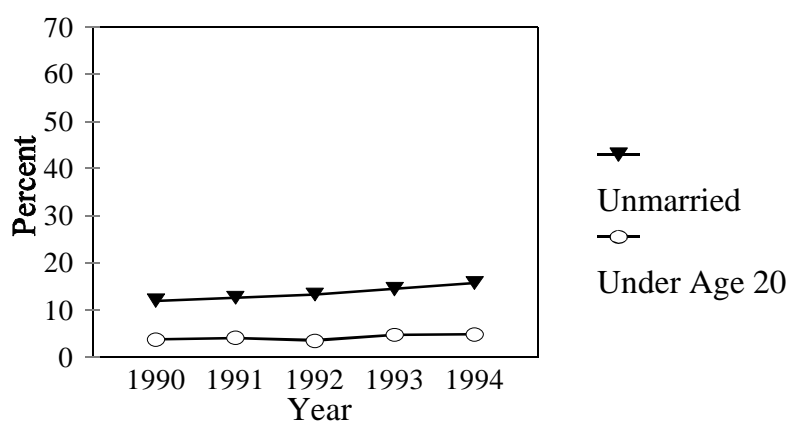
Source: Birth certificates, Wisconsin Center for Health Statistics.

Table 11. Births with Selected Maternal Characteristics, 1990-1994

Year	First Birth		Unmarried		< 12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%	N	%
1990	1,768	42.0	507	12.0	265	6.3	711	16.9
1991	1,634	40.0	517	12.7	236	5.8	730	17.9
1992	1,716	41.7	547	13.3	234	5.7	629	15.3
1993	1,626	41.7	562	14.4	237	6.1	594	15.2
1994	1,573	41.5	599	15.8	237	6.3	566	14.9

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of Wisconsin women who smoke during pregnancy has declined about 1 percentage point annually since 1990.

Figure 3. Percent of Births to Teens (<20) and Unmarried Women, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

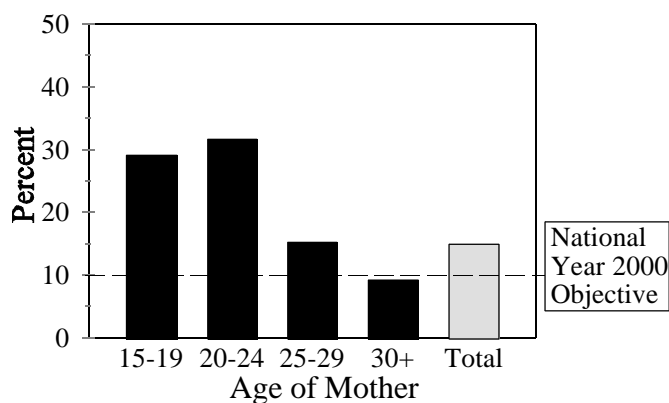
The long-term increase in the proportion of births to unmarried mothers continued during the 1990s. Infants born to unmarried women represented 24 percent of all Wisconsin births in 1990; by 1994, they were 27 percent of all births.

Table 12. Births with Selected Maternal Characteristics by Age, 1994

Age	Unmarried		<12 Years Education		Smoked during Pregnancy	
	N	%	N	%	N	%
15-19	156	85.7	102	56.0	53	29.1
20-24	208	41.5	68	13.6	158	31.6
25-29	127	11.0	34	2.9	176	15.3
30+	107	5.5	32	1.6	178	9.1

Source: Birth certificates, Wisconsin Center for Health Statistics.

The proportion of infants born to unmarried women was 25 percent or greater in one-fourth of Wisconsin counties. In most counties, the proportion of nonmarital births was higher among younger women.

Figure 4. Percent of Women Who Smoked During Pregnancy as a Percentage of All Live Births, 1994

Source: Birth certificates, Wisconsin Center for Health Statistics.

In general, older women are less likely to smoke during pregnancy than younger women. In 1994, 27 percent of Wisconsin teens ages 15-19 who gave birth smoked during their pregnancies, compared with 15 percent of women ages 30 and older.

**Table 13. Reported Pregnancies and Births, 1992-94
Annual Average**

Age	Reported Pregnancies	Number of Births
Less than 20	Data for this table are not available below the county level.	
20+		
Total		

Source: Birth certificates, reported induced abortions and reported fetal deaths, Wisconsin Center for Health Statistics.

The proportion of pregnancies that result in a live birth is generally higher for women over 20 than for younger women.

Table 14. Selected Factors Related to Infant Mortality, 1994

Risk	Percent of Births:		Area is:		
	Area	State	Low	Average	High
Low Birthweight	5.4	6.4		x	
Mother Age Less than 20	4.8	10.3	x		
Prenatal Care:					
Third Trimester or None	1.3	3.5	x		
Fewer than 5 Prenatal Visits	1.3	4.1	x		
5-9 Prenatal Visits	10.1	18.5	x		

Source: Birth certificates, Wisconsin Center for Health Statistics.

Note: The percentage of a given risk characteristic in an area is compared to the percent distribution of that characteristic for the state's 72 counties. A percentage is labeled "low" if it is # 4.6 for low birthweight; # 7.5 for mother under age 20; # 2.1 for third trimester or no prenatal care; # 2.2 for fewer than 5 prenatal care visits; # 15.1 for 5 to 9 prenatal care visits; or "high" if it is \$ 6.1 for low birthweight; \$ 11.5 for mother under age 20; \$ 4.3 for third trimester or no prenatal care; \$ 5.6 for fewer than 5 prenatal care visits; \$ 28.6 for 5 to 9 prenatal care visits.

In Wisconsin, 81.4 percent of births were to mothers with 10 or more prenatal care visits.

INFANT MORTALITY

Table 15. Number of Infant Deaths, 1990-1994

Year	Neonatal Deaths	Postneonatal Deaths	Total Infant Deaths
1990	19	6	25
1991	20	10	30
1992	15	7	22
1993	21	7	28
1994	22	11	33

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Neonatal deaths are those that occurred at less than four weeks (28 days) of age. Postneonatal deaths are those that occurred between four weeks and one year of age.

There were 541 infant deaths in Wisconsin in 1994, representing a statewide infant mortality rate of 7.9 deaths per 1,000 births. Most (60 percent) infant deaths occurred within the first 4 weeks of life, the neonatal period.

Table 16. Five-Year Average Infant Mortality, 1990-1994

	Average Annual Number of Deaths	Infant Mortality Rate: Area	State	Low	Area is: Average	High
Total Infant	27.6	6.9	8.0		x	
Neonatal	19.4	4.8	4.8		x	
Postneonatal	8.2	2.0	3.2	x		

Source: Death certificates, Wisconsin Center for Health Statistics.

Note: Rates are per 1,000 births. The infant mortality rates in an area are compared to the distribution of rates among the counties which had 20 or more infant deaths in the five-year period (31 counties for total infant deaths, 20 for neonatal deaths, and 10 for postneonatal deaths). An area rate is "low" if it is # 6.3 for total infant deaths; # 3.9 for neonatal deaths; # 2.6 for postneonatal deaths; or "high" if it is \$ 9.0 for total infant deaths; \$ 5.1 for neonatal deaths; \$ 4.4 for postneonatal deaths.

Thirty-one counties had at least 20 infant deaths during the five-year period 1990-1994. Of these, eight counties had an infant mortality rate of 9 per 1,000 births or higher.

HEALTH SERVICES**Table 17. Newborn Hospital Stays by Birthweight and Expected Source of Payment, 1993**

	Source of Payment		
	Medical Assistance	Other Pay Sources	All Sources
<u>Average Length of Stay (days)</u>			
Low Birthweight	21.8	9.8	13.3
All Other	2.3	2.3	2.3
<u>Average Charge</u>			
Low Birthweight	\$29,403	\$10,234	\$15,909
All Other	\$1,294	\$1,184	\$1,200

Source: Linked file of birth certificates, hospital discharges and Medical Assistance eligibility data, Wisconsin Center for Health Statistics.

Note: Hospitalizations that occurred out-of-state are not included. Average charge excludes physician charge.

Table 18. Number of Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		
	Medical Assistance	Other Pay Source	All Sources
Neonatal Disorders (760-779)	23	92	115
Acute Respiratory Infection (460-466)	24	58	82
Viral or Other Infection (010-089, 100-139)	16	28	44
Pneumonia (480-486)	5	5	10
Congenital Anomalies (740-759)	11	51	62
Injuries (800-999)	8	6	14
All Other	69	159	228
Total	156	399	555

Source: Infant hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: Includes all hospitalizations of infants less than one year of age, excluding newborns; counts are based on first-listed diagnosis. Hospitalizations that occurred out-of-state are not included.

Statewide, 1994 newborn hospital stays averaged 13 days for low birthweight infants, compared with 2 days for other infants. Average hospital costs for a newborn were more than \$15,300 for a low birthweight infant versus about \$1,200 for other infants.

Neonatal disorders (a wide variety of conditions originating in the perinatal period) and acute respiratory infections together accounted for about one-third of all 1994 infant hospitalizations in Wisconsin.

Table 19. Number of Preventable Infant Hospitalizations by Selected Diagnoses and Expected Source of Payment, 1994

Diagnosis at Discharge (ICD-9-CM Codes)	Source of Payment		All Sources
	Medical Assistance	Other Pay Source	
Bacterial Pneumonia (481 ,482.2, 482.3, 482.9, 483, 485, 486)*	3	4	7
Severe Ear, Nose, Throat Infection (382, 462, 463, 465, 472.1)*	5	13	18
Asthma (493)	4	1	5
Gastroenteritis (558.9)	3	5	8
Dehydration (276.5)	9	45	54
All Other Preventable	8	25	33
Total Preventable	32	93	125

Source: Preventable hospitalization file, data extracted from the Office of Health Care Information hospital inpatient database, Wisconsin Center for Health Statistics.

Note: “Preventable hospitalizations” include all hospitalizations for 28 conditions that have been defined as ambulatory-care-sensitive. Hospitalizations for these conditions are potentially preventable, in that timely and appropriate preventive and primary care can decrease hospitalizations by: (1) preventing the onset of an illness or condition, (2) controlling an acute episodic illness or condition, or (3) managing a chronic disease or condition. Accordingly, the number of preventable hospitalizations can be used to indicate problems with access, availability and adequacy of preventive and primary care. This table includes all hospitalizations for the defined conditions among infants under one year of age. Hospitalizations that occurred out-of-state are not included.

*Bacterial pneumonia excludes cases with secondary diagnosis of sickle cell anemia and patients less than 2 months old. Severe ear, nose and throat infections exclude cases with insertion of myringotomy tubes.

During 1994, there were 9,797 hospitalizations of infants (excluding deliveries) in Wisconsin. Of these, 27 percent (2,681) were for conditions in which a hospital stay is potentially preventable, representing a rate of 39.3 such hospitalizations per 1,000 infants.

Table 20. Participation in Special Health Programs, 1994

Population	Prenatal Care Coordination	WIC
Infants (less than 1 year)	---	699
Pregnant Women	3,582	221
Postpartum Women	---	311

Sources: Bureau of Health Care Financing (Prenatal Care Coordination); Wisconsin WIC Program.

Note: The Supplemental Food Program for Women, Infants, and Children (WIC) provides nutritional counseling and supplementary food for pregnant women, infants and young children at risk for poor health outcomes related to nutritional deficiencies. Prenatal Care Coordination (a Medical Assistance program administered by the DHSS Division of Health, Bureau of Health Care Financing) is the coordinated delivery of nonmedical (psychosocial, educational, and other) services to pregnant women. The program attempts to identify each woman's reproductive health needs and focuses on the prevention of poor birth outcomes. High-risk MA recipients are selected for this benefit, based on established criteria to determine high risk.

In December of 1994, 28,704 Wisconsin infants were receiving services from WIC. The number of women participating in WIC included 9,644 pregnant women and 12,830 receiving services during the year after giving birth.